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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,624	12/17/2001	Yuji Takahashi	P 290476 T36-139734M/AIO	7549
7590 01/21/2004			EXAMINER	
McGinn & Gibb PPLC Sean M McGinn 8321 Old Courthouse Road Suite 200 Vienna, VA 22182-3817			CHUNG, DAVID Y	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/015,624

Applicant(s)

TAKAHASHI ET AL.

Examiner

David Y. Chung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,8-19,21-24 and 26-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,3,8-12,15-19,21-24 and 26-34 is/are allowed.
- 6) ☒ Claim(s) 13 and 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Mochizuki (U.S. 6,386,720).

Mochizuki discloses a backlighting unit comprising a plurality of red, green, and blue LED's for illuminating an optical apparatus. A schematic view showing the basic construction of the light source device is shown in figure 1. In figure 1, a plurality of light emitting diodes (LED's) 3-1 to 3-n are arranged and mounted to the end surface 2 of the transparent light guide plate 1. Mochizuki teaches that by constructing the LED group by repeating the arrangement of a red LED, green LED, and a blue LED a plurality of times, a white linear light source or surface illuminant can be formed. See column 3, lines 38-44. Therefore, the numbers of red, green, and blue LED's are substantially equal. Figure 7 shows an optical apparatus including the light source device 16, light scattering sheet 160, and liquid crystal panel 17. See column 4, lines 50-65.

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Mochizuki does not disclose that the liquid crystal panel 17 in figure 7 contains twisted nematic (TN) or super twisted nematic (STN) liquid crystal. However, TN and STN liquid crystal panels were common and conventional at the time of invention. It would have been obvious to one of ordinary skill in the art at the time of invention to use a TN or STN liquid crystal panel because of the benefits associated with conventional devices such as well-understood behavior, and well-established supply chains and manufacturing methodologies.

Response to Arguments

Applicant's arguments filed December 10, 2003 have been fully considered but they are not persuasive regarding claims 13 and 14. These claims recite that the number of blue LED's is not smaller than the number of red LED's and that the number of blue LED's is not smaller than the number of green LED's. This does not exclude devices such as that disclosed by Mochizuki wherein the numbers of blue, red, and green LED's is substantially equal.

Allowable Subject Matter

Claims 2, 3, 8-12, 15-19, 21-24 and 26-34 allowed.

The following is a statement of reasons for the indication of allowable subject matter: none of the prior art taught or suggested a liquid crystal display wherein the number of blue LED's is larger than the number of green LED's.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Chung whose telephone number is (571) 272-2288. The examiner can normally be reached on Monday-Friday from 8:30 am to 5:00 pm.

KENNETH PARKER
PRIMARY EXAMINER

David Chung
GAU 2871
01/15/04